

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: Josh <jlogan@denver.net>  
Subject: [6443] (no subject)  
Message-ID: <199603311742.KAA00146@milehigh.denver.net>

FOR SALE: QRP Tranceiver NW 20 Assembled

This is 20 m rig 14005 to 14070 cw

Very hot superhet receiver, 5 Watts output (variable)  
6.5" wide, 5.5" deep, 2.7" high. 12 VDC

Built to Roy Gregson design

This rig has lots of audio to drive outboard speaker.  
Has sensitivity same as my Ten Tec Omni-D

\$110 ( I ship) Josh Logan WX7K (303) 988 -8302

Lakewood, Colorado

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: cjsterl@ix.netcom.com (Craig J. Sterling)  
Subject: [6441] 10 Meter gathering  
Message-ID: <199603311343.FAA29562@dfw-ix5.ix.netcom.com>

Gang in the Metro DC area,

Tonite, March 31st, 9:00pm EST, 28.490.00 SSB, Stop by and say hello!  
Yours truly, AA3MD will be there!!!!!!!!!!

CU,  
Craig, AA3MD  
Washington, D.C.

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: "John F. McClun" <mccclun@clark.net>  
Subject: [6460] 30M & New Sierra  
Message-ID: <199604010242.VAA16075@clark.net>

Chuck & Gang -

Just got the new Sierra with 80M & 30M boards so I'm set for the propagation study ;^). BTW, the Sierra receiver is HOT, as good as the ARK, better than my QRP +, IC 730, Sprint II (30M) and really digs out those small signals. Why didn't somebody tell me this sooner, I'd have sold the kids, car and farm for it instead of waiting for Uncle to send me back my money to get it.

Now, if I can just get some money for that 23 element, 30M yagi; three acres west of town and that high voltage tower I saw abandoned out by the airport..... does low power really affect your brain?

John N3REY

Always QRP!

From owner-qrp-l@Lehigh.EDU Sun Mar 31 22:09:44 1996

From: Dick G0BPS <Dick@dick.demon.co.uk>

Subject: [6442] ARCI m/ship Info update

Message-ID: <t+u2\$DABUPWxEw7d@Dick>

In message <2.2.16.19960329165954.21af8460@134.20.32.17>, Larry East

<LVE1@inel.gov> writes

>For those of you who are new to QRP or the QRP-L list and do not know about

>the Amateur Radio Club International (ARCI) QRP club, this info is for you

>(all you old-timers can just hit the "Delete" key).

>

>

>If you reside in Europe, you can join by sending a check or money order for

>7 British pounds payable to "G-QRP" to:

>

> Dick Pascoe, G0BPS

> Crete Road East

> Folkstone, Kent CT18 7EG

> Great Britain

>

>

Almost correct, add an 'e' and the house name:

Dick Pascoe G0BPS

Seaview House

Crete Road East

Folkestone

Kent CT18 7EG

UK

I handle any DX membership, that is non US. You can of course send it

direct to Mike, but this way eases his workload.

I email the details to Mike, saves postage for EU members.

TTFN de ...

Dick G0BPS / G0R00  
Kanga Products  
<http://ukinternet.com/ham/kanga>

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: richards@nylink.org  
Subject: [6453] Crystal problems/question  
Message-ID: <9604010026.AA21074@genesis.nylink.org>

Hi All,

I've got a problem with a radio that I hope someone can help with. It's an old crystal controlled 2m rig and I got the crystals for it on Friday. On Saturday I put the crystals in. 3 of the 6 xmit and 3 of the 6 recv channels do not work. But the working crystals will work in any slot. The non working ones will not work in any slot. By not working I mean there is no power out whatsoever, and very little recv. I have to touch the antennas together to get a slight wiggle of the S-meter. The working recv crystals are full scale when the signal generator is 3 feet away.

One of the working xmit crystals is sluggish. By that I mean when I key it up, it takes about a 1/2 second before the power meter jumps up, then I can see it slowly rise a bit more. This same crystal, when I check the dc voltage on it will cease putting power out. The voltage stays ok but no power out. Checking the voltage has no effect on the working crystals. On the non working recv crystals, checking the voltage causes the recv to work, or at least get a full scale indication on the meter.

Is this a crystal problem or something else in the radio? I can't quite get my head around the concept that 6 of 12 new crystals would be bad. Is it possible? The crystals have received no trauma that I am aware of. Any insights into trouble shooting crystals would be appreciated.

72 de Rick WZ2T NNY  
QRP-L, ARRL, QRP-ARCI, NorCal, NE-QRP, CQC

[richards@nylink.org](mailto:richards@nylink.org)

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: WJ4PRandy@aol.com  
Subject: [6462] Digital Dial For OHR400  
Message-ID: <960331225611\_182213976@mail04>

HI Folks!

I think I've found just about the neatest thing since sliced bread.. Its a "digital dial" from Radio Adventures Corp. and it has a new home in my OHR400.

This thing is based on a PIC micro and allows you to tell it what the offset used in your rig is so your are reading the operating frequency and not the vfo freq like with my RS counter.

The display is six digits (down to 100hz) and the 100hz segment can be programmed to be blanked if desired.

The whole display can be blanked to lessen the current draw after several seconds of a constant frequency and unit draws about 40 ma with the display off.

Coming from the world of digital dials (on everything) I was put off by the analog dial (and inaccuracies) on the qrp equipment in wide use by this crowd. Now I can put a digital readout on any qrp rig for about \$60 bucks!!(or less...)

The kit consists of two boards- a processor board and a display board joined by a ribbon cable. The display board is the same price as the processor board (\$29.95) which makes it a bit pricey for something that is very simple to fabricate on your own. I got the display board cuz I'm lazy...

The display board is \*just\* the right size to fit at the top center of the front panel of the 400, (Sorry Dick!) right where the Oak Hills message and model number are located.

It has several memories so you can put it in a standalone box and set it up for several rigs.

It handles reverse offsets too.

This thing is sooooo cool I just had to tell the gang about it. Since I just got it going I'll tell you more about it later. BTW, I just worked an N5 on 7.039.1Mhz...

73,  
Randy WJ4P

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: EVI <evi@access.digex.net>  
Subject: [6450] Filter design & analysis programs  
Message-ID: <Pine.SUN.3.92.960331182359.13781A-100000@access4.digex.net>

>From WA8MCQ--

There was some recent mention of a program called FDS124 when someone was talking about harmonics on the 40-9er, so it's time to put out a little advertisement again.

This program is for designing filters--low pass, high pass, elliptic, Chebyshev, Butterworth, and is really handy. It's copyrighted, but that's just to protect the author--it's a freebie. The original program is saved in the tools subdirectory at lehigh.edu. It's under pub/listserv/qrp-1/tools/fds124.zip; the name is Filter Design System, freeware written by Bob Lombardi, WB4EHS, who incidentally appears to have joined qrp-1 in recent months. The software is about 55K in PKZIPped format, and results in an EXE file of about 100K.

Bob released an upgrade recently, and I had that placed in the "tools" directory as well. It's FDS200A.zip (the cases on the letters may be wrong), about 163K in ZIP form and 240K of EXE data. He added some different filter types, but the main change is making it work with the ARRL's new ARD software. If you have the old version, it's probably worth the trouble to get the newer one, though the old one does most of what I need.

(Bob, if you're interested in another suggestion, how about making the ESC key work at all times? It's rather irritating sometimes to have to step through all the questions before you get to a point where you're allowed to exit the program.)

And while you're at it, if you have the W7ZOI Introduction to Radio Frequency Design from ARRL, the disk that comes with it has a program called GPLA, General Purpose Ladder Analysis, that is really handy for evaluating the filters you design with FDS. It has both tabular and graphical outputs and I find the two programs are really handy and fun together. Unfortunately they do not have compatible file formats so you have to type in the data that FDS spits out, but that's no big deal. One thing you do have to watch out for, though, is the order of components--FDS puts out a list with the "first" component at the top, at the source or generator end, while GPLA has the "last" component at the top, or the load end. If you have a symmetrical filter, with the same input and output impedances, this is not a problem. However, if you have one which has unequal

impedances, such as one matching a 12 ohm amp up to a 50 ohm load, you have to watch out for it or you'll get misleading results. Just type in the FDS list upside down.

(I am sending this through a "foreign" account since my home system is STILL dead, for the 8th day in a row. If you reply to this, you can use the address it was sent from, but you MUST include my name in the subject line--Mike C or Mike Ski--so whoever reads it will know where it should go.)

73 and Queue Our Pea DE WA8MCQ                      wa8mcq@bbs.abs.net

From owner-qrp-1@Lehigh.EDU   Sun Mar 31 22:09:44 1996  
From: KE3FL@delphi.com  
Subject: [6448] GelCells  
Message-ID: <01I2ZVM1XMXK98A0EA@delphi.com>

To all...

GELCELLS:

I have seen NEW gelcells at almost every hamfest I've attended here in the MD area. The 7 Ahr cell sells for \$10, no tax, no shipping. Before you pay for a gelcell though the mail, try a hamferst first.

73 de KE3FL/Phil

From owner-qrp-1@Lehigh.EDU   Sun Mar 31 22:09:44 1996  
From: adams@chuck.dallas.sgi.com (chuck adams)  
Subject: [6459] GM-30 Update  
Message-ID: <199604010203.CAA04959@chuck.dallas.sgi.com>

Gang,

Some time back I posted a review for the GM-30 from Small Wonder Labs owned and operated by Dave Benson, NN1G.

I mentioned that there was a small click on the elements when keying in the review. Nothing real annoying.

Well it looks like Dave solved the problem. In a phone conversation and in private email he asked that I check on a resistor just below U5, the 78L08 voltage regulator.

In the pictorial there is a 1K resistor lying flat just below U5. It turns out that this should be 100 ohm resistor. The schematic is correct. The pictorial is in slight error. Hey, what's a zero here or there. :-)

De ja vue, seems like Doug Hendricks in the instructions for assembly of the 40-9er says to follow the schematic. Too bad he didn't give me those instructions months ago.

Now I haven't tried this yet as I'm /5 in Houston for the week. Just when I thought I was through traveling. Hah. I also had fixed three other rigs from others and that was all the spare time I had this weekend. Let you know next weekend after the NorTex meeting. Maybe before but there are no guarantees. Someone else will beat me to it anyway, have at it. Post your results.

So in my step by step instructions for both the GM-30 and GM-20 that I sent out and that are on the ftp.LeHigh.edu site, the section apropos to this should read: (I'm learning those esoteric words from Nils, but nowhere close to the big guy)

```
<snip>
[ ] RFC1 10uH choke (brown-black-black)
[ ] 1K resistor (brown-black-red)
[ ] C8 33pF cap
[ ] 0.01uF cap
[ ] 0.01uF cap
[ ] W1 jumper
[ ] 100 ohm resistor below U5 (brown-black-brown)
[ ] 100 ohm resistor (brown-black-brown)
[ ] C13 270pF (red-violet-brown)
[ ] RFC2 choke 10uH (brown-black-black)
<snip>
```

And I have changed to the 100 ohm resistor just below W1 jumper. So, if you have not built yours or you have, change this puppy out if it's not 100 ohms. One of the problems with having 11,000 spare resistors is that I may have popped one in from the pile, not sure.

Hey, if it was easy everyone would be doing it. :-)

Thanks for listening and see you on 30M in May.

Another great rig from Dave at SWL. Did you know that there over 2,000 NN1G rigs around? Just a bit of trivia for you QRP buffs.

dit dit

--

Chuck Adams (K5FO CP-60) adams@sgi.com  
Box 181150, Dallas, TX 75218-8150

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: Robert Welch <willis@infinet.com>  
Subject: [6455] Great price on QRP+  
Message-ID: <Pine.SUN.3.91.960331201621.11468A-100000@user2>

Last chance it will not last long at this price .I plan to put info on local Ohio nets next week but wanted to get message to this group first.

\$395 + \$15 shipping if you can't pick it up in Ohio.It has a mfj microphone and a mfj #4112 Power Pack ac/batt so you can run it portable or as a fixed base station .It is in mint condition with all manuals and boxes. This message will not appear again so if you want what was called "qrp dream rig" in CQ Magazine Call Bob w8mcj 1-614-8813

mqq  
x

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: J0ppen6115@aol.com  
Subject: [6451] HW-9 help needed  
Message-ID: <960331185500\_182147075@mail02.mail.aol.com>

I have a HW-9 that appears to be dead on 30m, 17m, 12m, and 10m (both TX and RX). I get the audio, but nothing else. Can anyone think of anything that could cause these particular bands to fail, while the others work? Perhaps



they share a common oscillator section or something.

I appreciate any advise on this, since I just got the rig (without manual) and it will take a while to order one. Thanks in advance!

John, KJ6HZ

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: Dan Reynolds <bcdlr@midwest.net>  
Subject: [6439] Need qsl info on callsign XE3VD  
Message-ID: <199603310419.WAA12347@cdale1.midwest.net>

Can anyone help with qsl info on callsign XE3VD? Need it for a friend, well actually my elmer, better than a friend....

Peace+

Dan Reynolds, bcdlr@slip.net, KB9JL0

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: Wayne Barnhart <wayneb@on-ramp.ior.com>  
Subject: [6437] NW8020  
Message-ID: <Pine.LNX.3.91.960330201230.838B-1000000@on-ramp.ior.com>

Mail keeps bouncing to Roy Gregson. If you there where are you?  
I've got me a problem...

Finally got some time to work on the rig and got close, I think.

The transmitter wasn't working properly even though voltages and resistances checked out (sorta). The more trouble shooting I did I kept coming back to the transmit mixer. Finally I replaced the 602 and got STUFF.

Went ahead and peaked it up - set the transmit to 4 volts and was already for 20 come morning...not!

When I switched from the dummy load to the antenna (simple dipole) it all went wrong. My nice clean sidetone developed a sore throat. Transmit was putting out several watts more than it should have. Checked the swr and the meter claimed that it was something like 10:1. Frequency counter showed somewhere around 7mhz but couldn't lock.

I don't believe that my antenna is out of whack. Put the MFJ analyzer on it and according to that swr at 14030 is 1.7:1. I believe that, when I

put the antenna up I was originally using it with a TS520 and had about the same values.

Any ideas?

Later

Wayne WB7WHI  
Spokane, Wa.

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: "John Garrett"@mail.demon.net, G3RHP <john@antenna.demon.co.uk>  
Subject: [6446] PACTOR QRM on 14.060 MHz  
Message-ID: <828291717.28057.0@antenna.demon.co.uk>

Each time I listen on 20m I get more depressed by the number of PACTOR stations operating in the CW-only sub-band 14.060-14.065 MHz.

Anybody know why WA4SZK should be running a BBS on 14.060 (Mark), the QRP CW calling freq?

Perhaps these operators should try some QRP one day....

73 de John, G3RHP

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john@antenna.demon.co.uk

--

john@antenna.demon.co.uk

g3rhp@amsat.org

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: W3HMS@aol.com  
Subject: [6454] Paul Harden....CQC Articles....SUPER!!!!!!!  
Message-ID: <960331193425\_502496798@mail02.mail.aol.com>

Paul.....I think the four part series that you did on receivers in the CQC Newsletter ""Low Down" is absolutely superb in all respects. I have been a ham for 44 years and I have read much in many worldwide journals. You have articulated a subject as no other author has and with extraordinary clarity.

It seems to me that you have neither wasted nor omitted one word nor have you patronized even one person. If the authors of DP articles and books were 10%

your equal, the DP world would take a giant leap forward.

If anyone has problems with your articles, they need only reread them until comprehension is complete.

Congratulations and 73.

John Jaminet  
W3HMS  
31 March 1996

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: ROYGREGSON@aol.com  
Subject: [6445] QRP BOOK  
Message-ID: <960331135311\_260580055@emout09.mail.aol.com>

For Rich W0HEP....Misplaced your e-mail address. I have a new address for EMTECH for the QRP book.

EMTECH  
1127 Poindexter Ave West  
Bremerton, Wa. 98312

Will not know new phone number until I get moved, but in the meantime, the old number will be referred to the new number. Let me know if this gets to you in time. Thanks again for all your help. CUL Roy

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: adams@chuck.dallas.sgi.com (chuck adams)  
Subject: [6438] QRP Classics & W7EL  
Message-ID: <199603310425.EAA03413@chuck.dallas.sgi.com>

Gang,

I was looking at page 262 and page 263 on matching PA networks written by W7EL, Roy Lewallen, in Oct 1978 QST page 34 and another article by Hans-Joachim Brandt, DJ1ZB, in January 1980 QST page 55.

Roy was writing on Class C amplifiers in the final.

If some one has the equipment and a little time I'd like to see them do the following with any of the rigs most popular now days do the following.

1. Run spectrum analyzer before mods.
2. Put ferrite bead in base of PA.
3. Add 33V Zener from Collector to Ground(Emitter).

All this while taking harmonic output measurements.

Also for the 40-9er, and Wayne may have already done this, measure spectral output and the tack solder another 200pF across first cap in PI output network. I'm curious about something. I'm doing some Spice calculations. Film at 11.

dit dit

--

Chuck Adams (K5FO CP-60) adams@sgi.com  
Box 181150, Dallas, TX 75218-8150

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: KE3FL@delphi.com  
Subject: [6447] QRP for Knwd TS-50  
Message-ID: <01I2ZVL7UP0I98A0EA@delphi.com>

To adjust the power output of a Kenwood TS-50:

Kenwood Service  
310-639-5300

On the TX/RX-board- VR14 adjusts the high setting, VR16 the medium, and VR15 the low. Adjust the High power resistor FIRST, VR14, if you need to since it controls the overall power from which the others feed. VR15 & VR16 are almost directly below the speaker (on the right hand side) and are VERY small and close together. VR14 is larger and towards the back of the unit, almost up against a wall and pretty much in a direct line from the other two. Directions are given as if looking from the front of the rig.

MY settings:   4 -   5 Watts for low  
                 20 - 25 Watts for medium  
                 80 - 100 Watts for high.

Reason: 20 Watts is 6db above 5W, and 80 watts is 6 db above 20W.

So I get 6db increase for each adjustment in power setting.

Disadvantage: The Kenwood auto tuner REQUIRES 10W min to operate, so you'll have to use the medium power setting to tune the rig, another good reason to use 20 watts?

NOTE: As I noted above the high power setting CAN be changed and if you change it, it will change the medium and low power levels. This comes from experience. (My problem was that my TS-50 was putting out 20, 100, and 200 watts, all I needed to adjust was VR14 to fix all three to the correct factory values.) I then adjusted VR15 to lower the low power to 5 watts, and VR16 to lower the medium power to 20 watts.

good-luck & 73 de KE3FL/Phil <KE3FL@delphi.com>

From owner-qrp-l@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: Ken\_KD1XS@prodigy.com ( KEN HANKS)  
Subject: [6452] Thanks to All  
Message-ID: <013.04860967.KZBQ03A@prodigy.com>

To All QRP-L Members:

This list has to be one of the most interesting lists I have ever seen on the 'net. There is never a lack of interesting threads covering a wide variety of amateur radio topics.

I was first licensed in 1977 and was quite active until about 1983. I re-discovered the hobby 2 years ago and have had a great time since. One goal I have always had was to upgrade from my General Class license. I made the move to Advanced in 1994. However, the code was always tough for me. I operated code but always struggled. Since joining this list, I have greatly increased the time I spend on the air with CW. Between the unsuccessful hunts for the fox (I'll get you next time!) the Colorburst Contest, QRP beacons, as well as regular contacts, my speed not only increased, but, I began to be able to copy in my head, something I could never do before.

Well, today, I went to a local hamfest, sat down for the Extra exam, and blew it away. The

theory has never been a problem. The code test was a challenge, but I only got 1 wrong (almost got it right). I really have the members of this list to thank for helping me to increase my speed.

So to Chuck, Paul, and all the others, thanks. In the grand scheme of life, an Extra Class license may not be much, but I have wanted to earn one for many years. Looking forward to working more of you guys in the future and participating in QRP events.

In closing, I just want to say that QRP really stands for Quality Radio People.

72,  
Ken Hanks  
KD1XS\AE

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: Paul Erickson <paul1@wizard.ucs.sfu.ca>  
Subject: [6457] VE7CQK / qrp WPX SSB  
Message-ID: <9604010147.AA04662@wizard.ucs.sfu.ca>

Hi there,

Would like to compare notes with other qrpers who worked the ssb wpx contest.

For those who are interested, here is my summary sheet and dupe sheet (edited)

cheers, Paul  
VE7CQK  
email: paul1@wizard.ucs.sfu.ca

#### CQ WORLD WIDE WPX CONTEST 1996

Call: VE7CQK	Country: Canada
Mode: SSB	Category: Single Operator/QRP

BAND	QSO	QSO PTS	PTS/Q	PREFIXES
------	-----	---------	-------	----------

160	0	0	0.0	0
80	28	90	3.2	18

40	26	106	4.1	16	
20	125	281	2.2	94	
15	21	51	2.4	15	
10	0	0	0.0	0	
-----					
Totals	200	528	2.6	143	= 75,504

All reports sent were 59(9), unless otherwise noted.

#### Equipment Description:

QRP PLUS, TS930s (5watts), 40ft and 60ft homebrew verticals

#### Club Affiliation:

This is to certify that in this contest I have operated my transmitter within the limitations of my license and have observed fully the rules and regulations of the contest.

Signature \_\_\_W.Paul\_Erickson\_\_\_\_\_

#### MAILING ADDRESS:

PAUL ERICKSON VE7CQK  
3371 W.31ST AVE.  
VANCOUVER, BC V6S 1X6  
CANADA

\*\*\* DUPE SHEET for 80 SSB \*\*\*

VE7CQK 96SSBWPX Single Operator 31 Mar 1996 2353z

AB6EQ AB6ZV/7 AG9Y CK7PG K6HNZ K7QQ KA7ZUM KI7WX KJ7VP KM6YX KQ2M KQ4HC  
KT8X NB7N NE9U VD3EJ VD5RI VD6AO VD6JY VD7UBC W6KAT WA0PUJ WD0T WE9V WM2C  
WR6R/WH7 WT1S WU7Q

\*\*\* DUPE SHEET for 40 SSB \*\*\*

VE7CQK 96SSBWPX Single Operator 31 Mar 1996 2353z

6D8Z CY7A HC8A HH2PK J01YA0 K3MD K9CLO KB3TS/NH6 KC4ZV KC7V KD4LHA

KH6FKG KK6XN KM6YX KV0Q KZ6X N6VI/KH6 N7DD VD3EJ VD4VV WD0T WM2C  
WP4U WR6R/WH7 XE2DV YL3IZ/MM

\*\*\* DUPE SHEET for 20 SSB \*\*\*

VE7CQK 96SSBWPX Single Operator 31 Mar 1996 2353z

6D8Z	KI7LC	VE7TLK
7M1MCT	KI7WX	W5KFT
9A7A	KK6BB	W6TKF
AA00B	KK9W	W7KPD
AA0XQ	KL7RA	W7XA
AE6Y	KM6YX	W7ZMD
AK0A	KM9P	W9RZ/6
AL7MU	KN5S	WA0PUJ
CP6AA	K09Y	WA7LNW
DF9XV	KP4XS	WB8ENR
GI0KOW	KR0B	WB9CEP
GM6MD	KT8X	WD6DJY
HA8IE	KW8N	WE9V
HC8A	KY5N	WG9L
HH2PK	KZ6X	WH6CQH
JA1CG	LU2NI	WL7DU
JA1IDY	LU4FM	WM2C
JA1YDU	LY5A	WN6K
JA1YXP	LZ5W	WP4U
JA7BJS	N0VVH	WR6R/WH7
JA7DAH	N50ZB	WS8Y
JA7YFB	N6AZR	WU7Q
JA8YBY	N7DD	WZ1R
JE1KFX	N7MZW	WZ4F
JE6ZIH	N8II	XE2DN
JG2ZQZ	NC0P	
K1AR	NE8T	
K3SW	NE9U	
K5IC	NF7E	
K5UA	NI8L	
K5XI	NP2N/AG0	
K6ELX/7	NP4Z	
K6HNZ	NT5D	
K7NO	NW5H	
KA4RRU	NW6S	
KB0JSU	OH2IW	
KB0WY	OI7MHL	
KB3TS/NH6	OI8LQ	
KB5WWA	PJ9Y	
KC0ZC	RW1ZA	
KC3MR	RW9USA	



KC5RMW	S50A
KC6X	S59A
KC7V	SM2HWG
KD6DAE	SN2B
KD6QK	TM1C
KF9PL	UT7W
KF9YT	VD3EJ
KG6IP	VD7CFD
KI4HN	VE3RM

\*\*\* DUPE SHEET for 15 SSB \*\*\*

VE7CQK 96SSBWPX Single Operator 31 Mar 1996 2353z

AC10 AF5Z AH8A CW6V F05IW HC8A KB4GID KB5QBQ KC4ZV LU4FM N4BP P40V  
PJ9Y W4NTI W4WKQ W5VX WA5HLQ WB5YJX WC4E WR6R/WH7 ZX5J

From owner-qrp-l@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: jeffa@ix.netcom.com (Jeff Anderson)  
Subject: [6456] Re: filter design  
Message-ID: <199604010130.RAA10378@dfw-ix12.ix.netcom.com>

Another good source for information on filter design is Chris Bowick's book, "RF Circuit Design". In it he lists a number of tables and formulas that are fairly easy to apply for Butterworth, Chebyshev, and Bessel filters.

Some time ago I designed a couple of 3 element filters for 40 meters using these equations and tables. The values I calculated are as follows:

1. Chebyshev Low Pass, 0.1 dB ripple, 8 MHz cutoff, 50 ohms in/out:

$C1 = 570 \text{ pf}$ ,  $L = 1.6 \text{ uH}$ ,  $C2 = 570 \text{ pf}$

2. Chebyshev Low Pass, 0.5 dB ripple, 8 MHz cutoff, 50 ohms in/out:

$C1 = 740 \text{ pf}$ ,  $L = 1.3 \text{ uH}$ ,  $C2 = 730 \text{ pf}$

I prototyped the first filter, but *\*still\** haven't gotten around to checking its response, so can't say how well it works, but I'd be

curious to know how it performs in, say, the 40-9'er output. Looks like I'll have to do some more work on the bench...

- Jeff, WA6AHL

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: GREGOIRE@ENDOR.COM (ERNEST GREGOIRE)  
Subject: [6449] Re: GelCells  
Message-ID: <199603312319.SAA19910@nss2.CC.Lehigh.EDU>

Hello Gang, Gee I thought Tim's offer was a great offer, Digi Key sells new ones for \$28.00 and wants me to pay shipping too. I would ask myself why Digi Key gets such a high price when "NEW" batteries can be had at a Hamfest for \$10.00.

>To all...

>

>GELCELLS:

>

>I have seen NEW gelcells at almost every hamfest I've attended here  
>in the MD area. The 7 Ahr cell sells for \$10, no tax, no shipping.  
>Before you pay for a gelcell though the mail, try a hamferst first.

>

>73 de KE3FL/Phil

>

>

>

>

de AA1IK                    N.E.-QRP-C. # 202    ( Lead by example, It is better to    )  
                             QRP-L member #95.    ( pull a string than it is to push it.)

Ernie Gregoire  
RR 1 Box 221  
Canaan, NH. 03741

New England QRP Club, information  
available on request by sending me a

S.A.S.E. or via E-mail.

e-mail : GREGOIRE@ENDOR.COM  
packet : AA1IK@WA1WOK.FN43FE.NH.USA

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: Jim Stafford-W4QO <w4qo@america.net>  
Subject: [6461] Re: GelCells  
Message-ID: <Pine.SV4.3.91.960331225538.19223D-1000000@atl1>

Ron, I hope we see some of these at Dayton this year. I also like the smaller 1.2 Ah units as well. I have gotten these in past at Dayton, NEW for \$5, but then somehow I always seem to "cook~ them before the next year. I am getting better at it (not cooking them :) Thanks for the input.

73/72/jim/w4qo

On Sun, 31 Mar 1996 KE3FL@delphi.com wrote:

> To all...  
>  
> GELCELLS:  
>  
> I have seen NEW gelcells at almost every hamfest I've attended here  
> in the MD area. The 7 Ahr cell sells for \$10, no tax, no shipping.  
> Before you pay for a gelcell though the mail, try a hamferst first.  
>  
> 73 de KE3FL/Phil  
>  
>  
>

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: Alan Kaul <kaul@netcom.com>  
Subject: [6440] Re: QRP Classics & W7EL  
Message-ID: <Pine.3.89.9603302124.A24203-01000000@netcom22>

Chuck: interesting question about the about tack soldering a 200 pf cap across the 270 pf cap in the output of the 40-9'er. In a lot of 1980 designs of discrete rigs, the receiver input peeled off from the final transistor output circuit just prior to the harmonic filter. In many of

the designs, a front/back pair of 1N914 diodes shunted the excessive RF to ground, followed by a series resonant LC circuit tuned to the receive frequency leading to the receiver input. I think W7EL was the pioneer in using the LC circuit, after discovering that the diodes often shunted some of the intended receive signal to ground! Anyway, for 40 M one might expect the capacitance of the LC circuit to be around 40 pf, and then that amount of capacitance must be subtracted from the input capacitor of the Chebyshev harmonic output filter.

In tests previously, using a Motorola frequency analyzer MY 40-9'er demonstrated a 14mHz harmonic that was only down 15 or 16 dB from the 7mHz fundamental (depending on which day I measured it!)

The 40-9'er doesn't use a LC series receiver-input circuit. But the parallel-tuned input for receive tunes with about 200 pf of capacitance.

Hmmmmmm. Chuck, are you theorizing the harmonics are as strong as they are because the Chebyshev filter is 200 pf light on the input side?

If I get a chance this week, I'll take the 40-9'er to work and tack solder another 200 pf across the input side and measure the rig's output for harmonics. Will advise.

PS---despite the harmonics, I netted another 40-9'er QSO Saturday, with AA7TQ, camping near an Arizona ghost town. He was running 5w. And I cheated a bit --- I hooked up with Dave using my 2w Norcal 40. Then switched to the 40-9'er. My sigs dropped from 569 to 449 but it was still a solid QSO. And when I told him the power I was running (about 250 mw out using a weak 9v transistor battery) he asked if I was using 'one of those radios in a mint box?!!!!'

73/72 de alan

[<Alan Kaul, W6RCL>] kaul@netcom.com

From owner-qrp-1@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: Alan Kaul <kaul@netcom.com>  
Subject: [6444] Re: QRP Classics & W7EL  
Message-ID: <Pine.3.89.9603310934.A8608-0100000@netcom3>

Tnx ur note Stan. I bought a 36v Zener diode on my last order to Mouser, because I was thinking about adding it to the output stage of the

40-9'er. I have not done any mods yet (since it is in the Altoid's box--I wanted to wait and do them ALL at once!). I'm going to try the audio feedback loop, maybe add the Zener, am thinking about a band-pass input filter for the receiver (I have some SW broadcast stations bleeding thru occasionally at night), and alter/add to the output filtering to kill harmonics.

The 1988 ARRL handbook shows a three-element pi filter for the ''cubic incher'' and an accompanying ''spectral purity'' photo claims 2nd harmonic output is down 32-dB. That filter uses a pair of 470pf caps, and by backward engineering the coil, it looks as if the inductance is approx 1.156uH (which amounts to about 17 turns #26 on a T-50-6). I'm going to try the filter outboard first (if I can find room in the Altoid's box). Even if it develops 15-20dB suppression of the second harmonic, when you add that to the 15-16dB the existing pi filter develops you can end up with FCC-mandated -minus 30dB 2nd harmonic suppression. None of the QRP handbooks or ARRL handbooks or articles I've consulted suggests a 3-el pi filter approaches -30dB of second harmonic suppression. But since the 40-9'er board is already stuffed, a small add-on additional 3-el filter might make the difference.

Incidentally, the new QRP Quarterly has a pretty interesting article by WA8MCQ (who took pains to build a very sharp 5-el Chebyshev outboard filter which he added downstream but onboard the Ramsey in order to solve 2nd harmonic problems). There's even a filter program available from ftp.lehigh.edu (go to pub/listserv/qrp-l/tools and get filename FDS124.ZIP, in binary).

Anyway, hope to try some more tests and will post the results here.

73, 72 de alan

[<Alan Kaul, W6RCL>] kaul@netcom.com

From owner-qrp-l@Lehigh.EDU Sun Mar 31 22:09:44 1996  
From: Roger Hightower <aa7qy@netzone.com>  
Subject: [6458] Re: Thanks to All  
Message-ID: <199604010147.SAA19631@nz1.netzone.com>

At 06:46 PM 3/31/96 EST, KEN HANKS wrote:

>To All QRP-L Members:

>

>This list has to be one of the most interesting lists I have ever

>seen on the 'net. There is never a

>lack of interesting threads covering a wide variety of amateur radio  
>topics.

>(deleted)

>Well, today, I went to a local hamfest, sat down for the Extra exam,  
>and blew it away. The  
>theory has never been a problem. The code test was a challenge, but  
>I only got 1 wrong (almost  
>got it right). I really have the members of this list to thank for  
>helping me to increase my speed.

>

>(deleted)

>In closing, I just want to say that QRP really stands for Quality  
>Radio People.

>

>72,

>Ken Hanks

>KD1XS\AE

>

Congratulations, Ken. The List and members may have helped, but  
never forget that you did it yourself. QRP-L and the members were  
just an incentive.

72/73, de Roger, AA7QY

NorCal 1099   CoQRP 176   QRP-L 62   G-QRP 9081   ARCI 8946   NE-QRP 383